SW 158TH AVENUE STORM PRETREATMENT STRUCTURE

CITY OF BEAVERTON

PUBLIC UTILITY IMPROVEMENT

PUBLIC WORKS DEPARTMENT

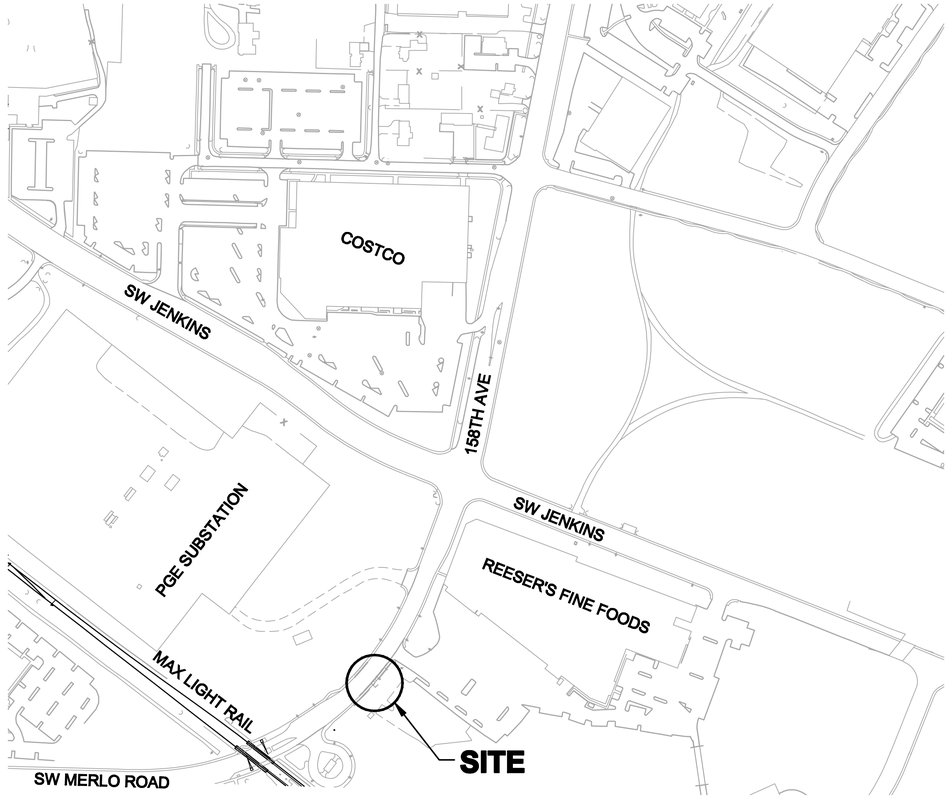
ABBREVIATIONS & SYMBOLOGY

	EXISTING	PROPOSED
WATER VALVE	WV	WV
WATER METER	WM	WM
HYDRANT		
FDC	FDC	FDC
BLOW OFF		
HOSE BIB		
AIR RELEASE		
WATER VAULT	W	W
WELL	W	W
REDUCER		
THRUST BLOCK		
UTILITY POLE		
GUY WIRE		
ELECT. VAULT	E	E
TEL MANHOLE	T	T
TEL VAULT	TV	TV
TEL PEDESTAL	TP	TP
CABLE RISER	C	C
GAS METER	GM	GM
GAS RISER	G	G
GAS VALVE		
LIGHT		
SIGNAL	S	S
JUNCTION BOX	J	J
STREET LIGHT		
POWER METER	PM	PM
SAN CLEANOUT		
SANITARY MANHOLE	S	S
STORM CLEANOUT		
STORM MANHOLE	D	D
CATCH BASIN		
DECID TREE		
CONFIR TREE		
SIGN		
MAILBOX	M	M
BOLLARD		
BARRICADE		

	EXISTING
CABLE TV	CATV
POWER	E
FIBER OPTICS	FO
GAS	GAS
TELEPHONE	T
STORM	SD
WATER	W
SANITARY	SAN
RIGHT OF WAY	R/W
CL ROW	
PROP LINE	
ABANDONED UTILITY	

	PROPOSED
CABLE TV	CATV
POWER	E
FIBER OPTICS	FO
GAS	GAS
TELEPHONE	T
STORM	SD
WATER	W
SANITARY	SAN
RIGHT OF WAY	R/W
CL ROW	
PROP LINE	

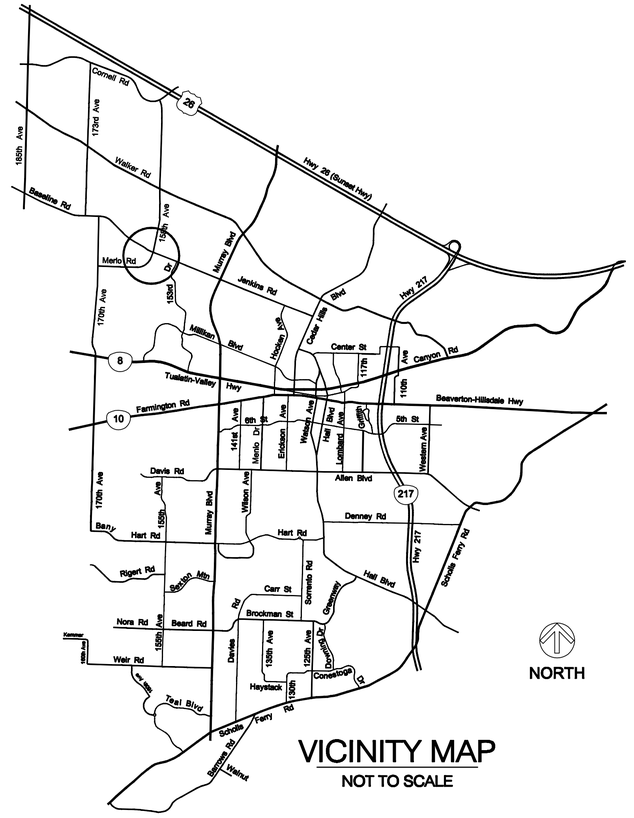
AC	ASPHALTIC CONCRETE	IR	IRON ROD
AD	ALGEBRAIC DIFFERENCE	JT	JOINT
ADA	AMERICANS WITH DISABILITIES ACT	K	RATE OF CURVATURE
APPROX	APPROXIMATELY	LAT	LATERAL
APPVD	APPROVED	LF	LINEAL FEET
APWA	AMERICAN PUBLIC WORKS ASSOCIATION	LS	LONG SLEEVE
ASSY	ASSEMBLY	LT	LEFT
AWWA	AMERICAN WATER WORKS ASSOCIATION	LVC	LENGTH OF VERTICAL CURVE
BFV	BUTTERFLY VALVE	MAX	MAXIMUM
BO	BLOW OFF	MATL	MATERIAL
BVCE	BEGIN VERTICAL CURVE ELEVATION	MECH	MECHANICAL
BVCS	BEGIN VERTICAL CURVE STATION	MFR	MANUFACTURER
C.O.B.	CITY OF BEAVERTON	MH	MANHOLE
CB	CATCH BASIN	MIN	MINIMUM
CI	CAST IRON	MJ	MECHANICAL JOINT
CL	CENTERLINE	NIC	NOT IN CONTRACT
CMP	CORRUGATED METAL PIPE	OC	ON CENTER
CO	CLEANOUT	OD	OUTSIDE DIAMETER
CONC	CONCRETE	P	POWER
CPLG	COUPLING	PRV	PRESSURE REDUCING VALVE
CU	COPPER	PT	POINT
CWS	CLEAN WATER SERVICES	PVI	POINT OF VERTICAL INTERSECTION
DEFL	DEFLECT	PVC	POLYVINYL CHLORIDE
DTL	DETAIL	PVMT	PAVEMENT
DI	DUCTILE IRON	R/W	RIGHT-OF-WAY
DIA	DIAMETER	RCP	REINFORCED CONCRETE PIPE
EG	EXISTING GRADE	RDCR	REDUCER
EL, ELEV	ELEVATION	REINF	REINFORCE(D) (ING) (MENT)
EP	EDGE OF PAVEMENT	REQ'D	REQUIRED
EQ	EQUAL	RESTR	RESTRAINED
ESMT	EASEMENT	RIM	RIM ELEVATION
EVCE	END VERTICAL CURVE ELEVATION	RT	RIGHT
EVCS	END VERTICAL CURVE STATION	S/W	SIDEWALK
EX, EXTG	EXISTING	SAN	SANITARY SEWER
FG	FINISHED GROUND	SCHED, SCH	SCHEDULE
FITG	FITTING	SD	STORM DRAIN
FH	FIRE HYDRANT	SLV	SLEEVE
FLEX	FLEXIBLE	SS	SANITARY SEWER
FLG	FLANGE	STA	STATION
FLR	FLOOR	STL	STEEL
FL	FLOW LINE	TB	THRUST BLOCK
G	GAS	TBC	TOP BACK CURB
GALV	GALVANIZED	TFC	TOP FACE CURB
GB	GRADE BREAK	T, TEL	TELEPHONE
GR	GRADE	TEMP	TEMPORARY
GV	GATE VALVE	THRD	THREAD(ED)
HDPE	HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
HYD	HYDRANT	UNK	UNKNOWN
IE	INVERT ELEVATION	VLV	VALVE
IP	IRON PIPE	W	WATER



PROJECT SITE MAP

1" = 200'

NORTH



VICINITY MAP

NOT TO SCALE

POTENTIAL UNDERGROUND FACILITY OWNERS

DIG SAFELY

CALL THE OREGON ONE-CALL CENTER

1-800-332-2344

EMERGENCY TELEPHONE NUMBERS

NW NATURAL GAS	
M-F 7am-5pm	503-226-4211 EXT.4313
AFTER HOURS	503-226-4211
PGE	503-464-7777
QWEST	1-800-573-1311
VERIZON	1-800-483-1000

NOTICE TO EXCAVATORS:

ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.
(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)-232-1987).

1	CONSTRCT SET	10/06/09
	1ST SUBMITTAL	8/04/09

RELEASES AND SHEET INDEX

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●	●	2	GENERAL NOTES
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REGISTERED PROFESSIONAL ENGINEER
17943PE
OREGON
JULY 25, 1995
MARK E. BOGUSLAWSKI
EXPIRATION DATE: 12/31/

PROJECT INTENT - PRETREATMENT OF SURFACE WATER RUNOFF. CONSTRUCTED BY CITY FORCES

NAD 83 OREGON STATE PLANE, NORTH ZONE, INTERNATIONAL FOOT

CITY OF BEAVERTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

DESIGNED BY:	MB	NO.	DATE	REVISION	BY	SW 158TH AVENUE - STORM PRETREATMENT STRUCTURE
DRAWN BY:	AB	1	10/06/09	CONSTRUCTION SET – ADJUSTED TO FIT VAULT SHOP DRAWINGS	MB	TITLE SHEET
CHECKED BY:	MB					DATE: 8/04/09
APPROVED BY:	MB					PROJECT NO: 8073
						SHEET NO: 1 OF 5

THIS DRAWING IS FULL SIZE WHEN 22" X 34" OR IS REDUCED TO HALF SCALE WHEN 11" X 17"

FILE: Y:\CAD SERVICES\DRAWINGS\2009\8073 - 158th WQ OUTFALL\CADD\8073-158th Outfall - SITE.dwg TAB:Cover - SHEET 1
PLOTTED: 10/12/09 AT 7:57AM BY: dbarrett

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR AT LEAST 48 HOURS (TWO FULL WORKING DAYS) PRIOR TO BEGINNING THE PROJECT. CONNECTIONS BETWEEN EXISTING INFRASTRUCTURE AND NEW WORK SHALL NOT BE MADE UNTIL NECESSARY INSPECTIONS AND TESTS HAVE BEEN COMPLETED ON THE NEW WORK AND IT IS FOUND TO CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WHERE FACILITIES CROSS. CONTRACTOR SHALL POT HOLE EXISTING UTILITIES 200 FEET AHEAD OF LAYING PIPE AT ALL CROSSINGS. IF CONFLICTS ARISE, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. UTILITY LOCATE ONE CALL # 1-800-332-2344
3. ALL CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH THE MOST RECENT VERSION OF CITY OF BEAVERTON STANDARDS, OREGON APWA/ODOT STANDARD SPECIFICATIONS, CLEAN WATER SERVICES (CWS) STANDARDS (INCLUDING EROSION PREVENTION AND SEDIMENT CONTROL) AND THE OREGON ADMINISTRATION RULES (OAR), CHAPTER 333, UNLESS NOTED ON THE PLANS OR SPECIFIED OTHERWISE.
4. ALL EXISTING UTILITIES DISTURBED BY CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AND THE RESPECTIVE UTILITY COMPANY NOTIFIED OF THE DISTURBANCE WITHOUT DELAY.
5. CONTRACTOR SHALL SUBMIT "AS-BUILT" INFORMATION TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OFCONSTRUCTION.
6. THE CONTRACTOR SHALL NOT DAMAGE OR CUT EXISTING A.C. PIPE. EXCAVATE AND EXPOSE EXISTING A.C. PIPE UNTIL APPROPRIATE JOINTS ARE EXPOSED. DISCONNECT THE A.C. PIPE JOINT AND REMOVE THE APPROPRIATE SECTIONS OF A.C. PIPE WITHOUT CUTTING OR DAMAGING THEM. DISPOSE OF REMOVED A.C. PIPE IN A LEGAL MANNER AND IN CONFORMANCE WITH THE REQUIREMENTS OF AUTHORITIES CONTROLLING AIR POLLUTION AND SOLID WASTE DISPOSAL. CONTRACTOR SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF OREGON REVISED STATUTES (ORS) 468A.700 THROUGH 468A-760.
7. FINAL LOCATIONS OF ALL VALVES AND VALVE BOXES, FIRE HYDRANTS, AIR RELEASE ASSEMBLIES, SERVICE CONNECTION CORP STOPS, DRIVEWAY APRONS, SEWER LATERALS, PERMANENT SIGNS, AND CATCH BASINS SHALL BE FIELD LOCATED. THE CONTRACTOR SHALL COORDINATE FINAL LOCATIONS OF THE DESCRIBED ITEMS WITH THE OWNER'S REPRESENTATIVE.
8. UTILITY CONSTRUCTION SEQUENCING WILL BE REQUIRED IN ORDER TO PREVENT CONFLICTS WITH EXISTING UTILITIES REMAINING IN SERVICE UNTIL NEWLY INSTALLED UTILITIES ARE CONNECTED AND IN SERVICE. CONTRACTOR SHALL SEQUENCE UTILITY WORK INCLUDING TEMPORARY CONNECTIONS AND BYPASSES AS REQUIRED SUCH AS TO MINIMIZE DISRUPTION OF SERVICES. SEE SECTION 105.4.01WITHIN THE SPECIFICATIONS REGARDING CONSTRUCTION SEQUENCING REQUIREMENTS FOR THIS PROJECT.
9. MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN CONDITION, FREE FROM OBSTRUCTIONS AND HAZARDS.
10. ANY CHANGE IN CONSTRUCTION AFTER PLAN APPROVAL MUST BE SUBMITTED IN WRITING AND APPROVED BY THE CITY PRIOR TO CHANGE.
11. AT THE END OF EACH WORK DAY ALL TRENCHES SHALL BE BACKFILLED AND ALL TRENCHES WITHIN STREETS SHALL BE TEMPORARY PAVED OR COVERED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. STEEL SHEET PLACEMENTS SHALL BE LIMITED TO 36 HOURS IN ANY ONE LOCATION. BEYOND 36 HOURS, EXCAVATIONS SHALL BE PAVED. AC PAVEMENT EITHER TEMPORARY OR PERMANENT, SHALL BE HOT MIX BITUMINOUS ASPHALT. NO TRENCH, ON-SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR AND IS LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE PROSECUTION OF THE WORK.
12. EFFECTIVE EROSION CONTROL, DUST CONTROL, AND DRAINAGE CONTROL IS REQUIRED AT ALL TIMES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF ALL WORK, ADJACENT PROPERTIES AND DOWNSTREAM FACILITIES FROM EROSION AND SILTATION DURING THE COURSE OF THE WORK. ANY DAMAGE RESULTING FROM SUCH EROSION AND SILTATION SHALL BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR.
13. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS. IF A DRIVEWAY MUST BE BLOCKED, THE CONTRACTOR SHALL GIVE THE HOMEOWNER, APARTMENT MANAGER AND/OR BUILDING OWNER 24 HOURS NOTICE AND SHALL ENSURE ACCESS TO DRIVEWAYS AT THE END OF EACH WORK DAY.
14. THE CONTRACTOR SHALL EXERCISE ALL DUE CARE IN PROTECTING PROPERTY ALONG THE ROUTE OF THE IMPROVEMENTS. THIS PROTECTION SHALL INCLUDE, BUT NOT BE LIMITED TO, TREES, YARDS, FENCES, DRAINAGE LINES, MAIL BOXES, DRIVEWAYS, SHRUBS, LAWNS, IRRIGATION SYSTEMS, WITHIN ANY RIGHTS-OF-WAYS AND EASEMENTS. IF ANY OF THE ABOVE HAVE BEEN DISTURBED, THEY SHALL BE RESTORED AS NECESSARY TO AS NEAR THEIR ORIGINAL CONDITION AS POSSIBLE OR REPLACED IN KIND.
15. ALL SURVEY MONUMENTS SHALL BE LOCATED AND PROTECTED, EXCEPT AS SPECIFICALLY DIRECTED BY THE CITY ENGINEER.
16. THE CONTRACTOR SHALL PERFORM ALL THE WORK SHOWN ON THE DRAWINGS AND ALL INCIDENTAL WORK CONSIDERED NECESSARY TO COMPLETE THE PROJECT IN AN ACCEPTABLE MANNER.
17. THE CONTRACTOR AND OR SUB-CONTRACTOR SHALL HAVE A MINIMUM OF ONE SET OF CITY APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING EACH CONSTRUCTION PHASE WHILE WORK IS BEING DONE.
18. ALL MATERIAL SUPPLIERS SHALL SUBMIT TO THE ENGINEER PROOF OF MATERIAL(S) TESTED IN ACCORDANCE WITH SPECIFICATIONS. BY ACCEPTANCE OF THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR CERTIFIES THAT ALL MATERIALS DELIVERED TO THE JOB SITE WILL MEET OR EXCEED THOSE SPECIFICATIONS. ANY MATERIAL NOT CONFORMING SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST TO THE OWNER.
19. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIALS.

TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL TO BE PERFORMED IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES AND OREGON AMENDMENTS AS REQUIRED. THE CITY CAN REQUIRE ADDITIONAL TRAFFIC CONTROL MEASURES AS NEEDED TO PROVIDE FOR PUBLIC SAFETY.
2. ON RESIDENTIAL LOCAL STREETS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL REQUIRED TRAFFIC CONTROL WHEN WORK IS BEING DONE IN THE RIGHT OF WAY.
3. ALL TRAFFIC CONTROL MEASURES NEED TO BE SUBMITTED TO THE CITY OF BEAVERTON FOR REVIEW AT LEAST 5 (FIVE WORKING DAYS PRIOR TO CONSTRUCTION. ALL STREET CLOSURES SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER, AT LEAST 5 (FIVE) WORKING DAYS IN ADVANCE.
4. UPON APPROVAL, THE CONTRACTOR SHALL NOTIFY THE BEAVERTON POLICE DEPARTMENT, TUALATIN VALLEY FIRE AND RESCUE AND THE BEAVERTON SCHOOL DISTRICT TRANSPORTATION OFFICE AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSURE.
5. TRAFFIC CONTROL PLANS SHALL COMPLY WITH THE OREGON DEPARTMENT OF TRANSPORTATION - "SHORT TERM TRAFFIC CONTROL HANDBOOK". TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PREPARED BY THE FEDERAL HIGHWAY ADMINISTRATION, LATEST REVISION. CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS SPECIFIED IN ROAD PERMITS ISSUED FOR THIS PROJECT.
6. CONTRACTOR SHALL COORDINATE ALL STREET AND SIDEWALK CLOSURES WITH THE CITY. CONTRACTOR SHALL SUPPLY SIGNING AND BARRICADES AS REQUIRED TO ASSURE AUTOMOTIVE AND PEDESTRIAN SAFETY.

EROSION CONTROL STANDARD NOTES

1. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.

3. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.

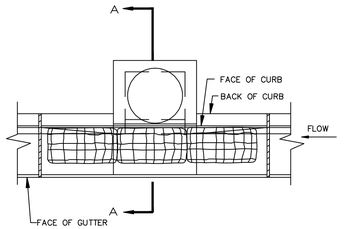
4. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT LEAVE THE SITE.

5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

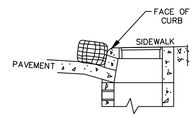
6. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.

7. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

8. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.



PLAN VIEW



SECTION A-A

NOTE:
1. FOR USE IN SHORT TERM APPLICATIONS ONLY.
2. CONTRACTOR RESPONSIBLE FOR ADEQUATE NUMBER OF HAY BALES. PROVIDE ONE FULL BALE EACH SIDE OF CURB OPENING WITH NO GAPS OR OPENINGS IN CONTROL DEVICE.
3. THE SEDIMENT CONTROL DEVICE SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HRS OF A STORM EVENT.

BIO-BAG INLET BARRIER AT CURB INLET

PROJECT INTENT - PRETREATMENT OF SURFACE WATER RUNOFF. CONSTRUCTED BY CITY FORCES
NAD 83 OREGON STATE PLANE, NORTH ZONE, INTERNATIONAL FOOT

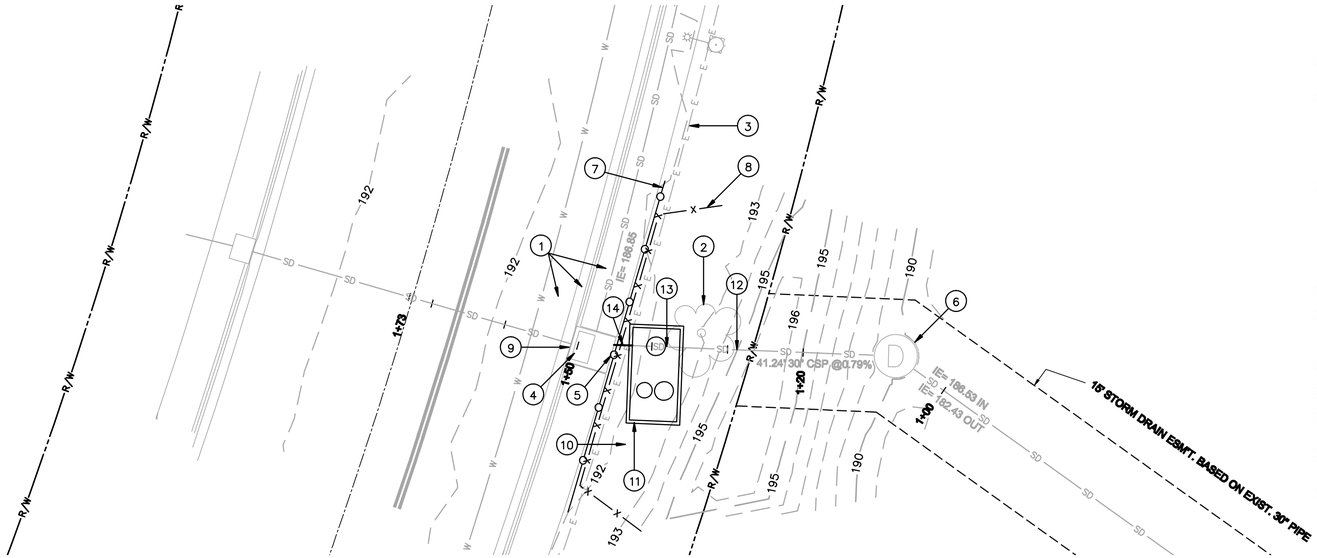
REGISTERED PROFESSIONAL ENGINEER
17943PE
OREGON
JULY 25, 1995
MARK E. BOGUSLAWSKI
EXPIRATION DATE: 12/31/

CITY OF BEAVERTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

DESIGNED BY:	MB	NO.	DATE	REVISION	BY	SW 158TH AVENUE - STORM PRETREATMENT STRUCTURE
DRAWN BY:	AB	1	10/06/09	CONSTRUCTION SET – ADJUSTED TO FIT VAULT SHOP DRAWINGS	M	GENERAL NOTES
CHECKED BY:	MB					DATE: 8/04/09
APPROVED BY:	MB					PROJECT NO: 8073
						SHEET NO: 2 OF 5

THIS DRAWING IS FULL SIZE WHEN 22" X 34" OR IS REDUCED TO HALF SCALE WHEN 11" X 17"

FILE: X:\CAD SERVICES\DRAWINGS\2009\8073 – 158th WQ OUTFALL\CADD\8073–158th Outfall – SITE.dwg TAB:General Notes – SHEET 2
PLOTTED: 10/12/09 AT 7:57AM BY: dbarrett

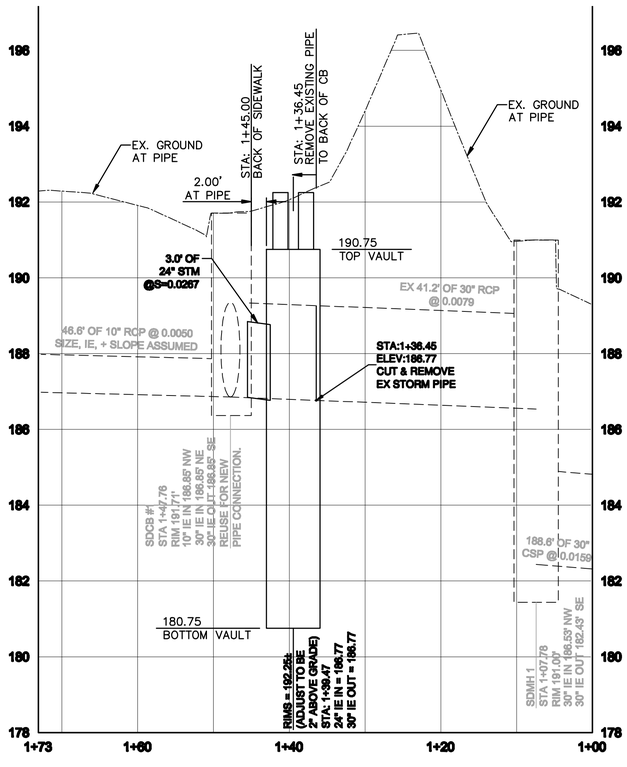


STORM LINE 1 PLAN

1" = 10'

STORM NOTES

1. PROTECT EXISTING PAVEMENT, SIDEWALK, AND GUTTER AT ALL TIMES.
2. REMOVE EXISTING TREE. EXCAVATE OUT AROUND ROOT BALL AND SET ASIDE TO REPLANT AT END OF PROJECT. DETERMINE IN FIELD IF TREE CAN BE SAVED AT TIME OF EXCAVATION AND PROJECT COMPLETION. REPLACE TREE WITH SIMILAR TYPE AND SIZE IF EX TREE IS NOT SALVAGEABLE.
3. SUSPECTED ELECTRICAL LINE LOCATIONS FOR STREET LIGHTS AND/OR TRAFFIC SIGNALS. LOCATE TICKET #9089042 MAY 8TH, 2009. STREET LIGHT AND TRAFFIC SIGNALS CONDUITS WERE NOT LOCATED BY RESPECTIVE OWNER. KEVEN ELLINGTON (WACO) CALLED ON 8-5-09 AND STATED THAT WACO WOULD PROVIDE LOCATES FOR STREET AND SIGNAL CONDUITS. PHONE: 503-846-7954.
4. EXISTING CATCH BASIN TO REMAIN.
5. 1+45.00 = BACK OF SIDEWALK AT CB. CAN BE USE AS A REFERENCE DURING CONSTRUCTION. ELEV=191.75
6. PROTECT EXISTING STORM MANHOLE AT ALL TIMES
7. INSTALL ORANGE CONSTRUCTION FENCING.
8. INSTALL SEDIMENT FENCE. TO BE IN PLACE IF RAIN IS FORECASTED.
9. INSTALL INLET PROTECTION. INSTALL INLET PROTECTION AT NEXT DOWN STREAM INLET (IF ANY).
10. POSSIBLE IRRIGATION SYSTEM IN AREA. USE CAUTION WHILE EXCAVATING. DAMAGED SECTIONS MUST BE REPAIRED.
11. INSTALL TREATMENT VAULT. INSTALL EDGE OF VAULT 2.0' FROM SIDEWALK EDGE. SEE VAULT DETAILS.
12. REMOVE AND RELAY EX PIPE SECTIONS AND BEND PIPE AT JOINTS TO MAKE PIPE CONNECTION TO VAULT WORK. DETERMINE IN FIELD.
13. REMOVE EXISTING SECTION OF STORM PIPE.
14. INSTALL NEW STORM PIPE. SEE PROFILE.



SDLN 01 PROFILE
HORIZONTAL SCALE: 1"= 10
VERTICAL SCALE: 1"= 2

SUGGESTED CONSTRUCTION SEQUENCE

1. GET BIDS ON COMPETING STURCTURES (SHEET 4A VS 4B).
2. OBTAIN CORRECT SHOP DRAWINGS FROM SUCCESSFUL BIDDER. PROJECT ENGINEER TO APPROVE.
3. CALL FOR LOCATES.
4. INSTALL INLET PROTECTION, SEDIMENT FENCING, ORANGE CONSTRUCTION FENCING AS NECESSARY.
5. REMOVE EXISTING TREE. SEE CONSTRUCTION NOTES.
6. DETERMINE IF STREET LIGHTING CONDUIT, IRRIGATION LINES, OR OTHER CONDUIT EXISTS IN PROJECT AREA. CONTACT PROJECT ENGINEER IF CONDUITS EXIST. VAULT LOCATION MAY NEED FIELD LOCATION ADJUSTMENT IF CONDUITS EXIST.
7. EXCAVATE FOR UTILITY VAULT. OVER EXCAVATION WILL BE NEEDED FOR TRENCH SHORING, AND VAULT ADJUSTMENT.
8. CUT AND REMOVE EXISTING 30" PIPE. REMOVE PIPE TO BACK OF CATCH BASIN.
9. HAMMER AND REMOVE EXISTING CB WALL AS NEEDED TO PLACE NEW 24" LINE ALONG NEW ALIGNMENT, MATCH INVERT.
10. PLACE 24" PIPE ALONG ALIGNMENT, AND SLIP AS MUCH AS PRACTICAL INSIDE THE CATCH BASIN. DO NOT SET PIPE. PIPING WILL BE MOVED AND FINALIZED AFTER THE VAULT IS IN PLACE.

SUGGESTED CONSTRUCTION SEQUENCE

11. DETERMINE ELEVATION BETWEEN VAULT BOTTOM AND IE OUT OF STRUCTURE. ADJUST EXCAVATION SO THAT THE NEW IE AND THE OUT IE MATCH (INCLUDE ROCK BASE NOTED BELOW).
12. PLACE APPROX 4" OF 3/4" MINUS FOR LEVELING PROPOSES, THEN COMPACT MATERIAL UNDER VAULT. CHECK IES, FILL OR EXCAVATE AND RECOMPACT AS NEEDED.
13. SLIDE VAULT ONTO OUTLET STORM PIPE. ALIGN INLET AND VAULT INLET. SEAL JOINT BETWEEN VAULT AND PIPE AS NEEDED.
14. SLIDE 24" PIPE OUT OF CB AND INTO VAULT. SEAL JOINT BETWEEN VAULT AND PIPE AS NEEDED. RECONSTRUCT AND GROUT PIPE TO CATCH BASIN AS NEEDED.
15. FINISH INSTALLING VAULT STRUCTURES PER MANUFACTURES RECOMMENDATIONS.
16. BACKFILL AND COMPACT AS NEEDED AROUND VAULT.
17. REPLANT AND RESTORE SITE TO EQUIVALENT CONDITION PRIOR TO CONSTRUCTION.
18. REMOVE EROSION CONTROL MEASURES AND ORANGE CONSTRUCTION FENCING AFTER SOIL IS STABILIZED AND SITE IS NO LONGER A SAFETY HAZARD.
19. RESTORE LANDSCAPING AND IRRIGATION TO SATISFACTION OF STEVE BRENNAN.

NOTE:

THE EXISTING 30" PIPE SIZE IS SUBSTANTIALLY LARGER THAN IT NEEDS TO BE TO CONVEY SURFACE WATER RUNOFF FROM THE ACTUAL TRIBUTARY AREA.

INSTALLATION OF 24" PIPE SHALL BE WATER TIGHT AT ALL JOINTS AND CONNECTIONS.

LOCATES CALL FOR ON MAY 8TH, 2009
LOCATE TICKET NUMBER 9089038.

N

SCALE
10 0 5 10
1 INCH = 10 FEET

REGISTERED PROFESSIONAL ENGINEER
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APPROVED BY:	MB				

SW 158TH AVENUE - STORM PRETREATMENT STRUCTURE

STORM PLAN AND PROFILE

DATE: 8/04/09
PROJECT NO: 8073
SHEET NO: 3 OF 5

THIS DRAWING IS FULL SIZE WHEN 22" X 34" OR IS REDUCED TO HALF SCALE WHEN 11" X 17"

FILE: X:\CAD SERVICES\DRAWINGS\2009\8073 - 158th WQ OUTFALL\CADD\8073-158th Outfall - SITE.dwg TAB:Plan & Profile - SHEET 3
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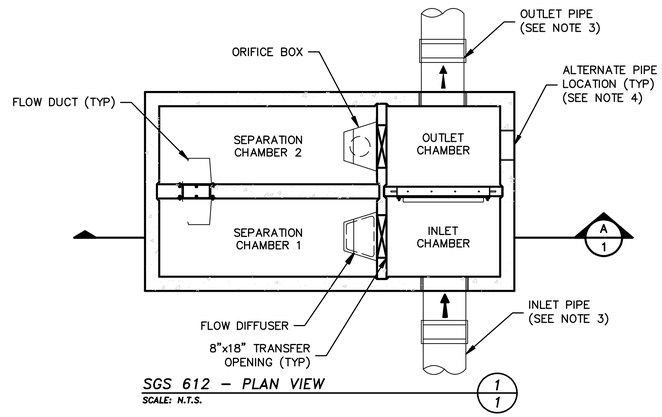
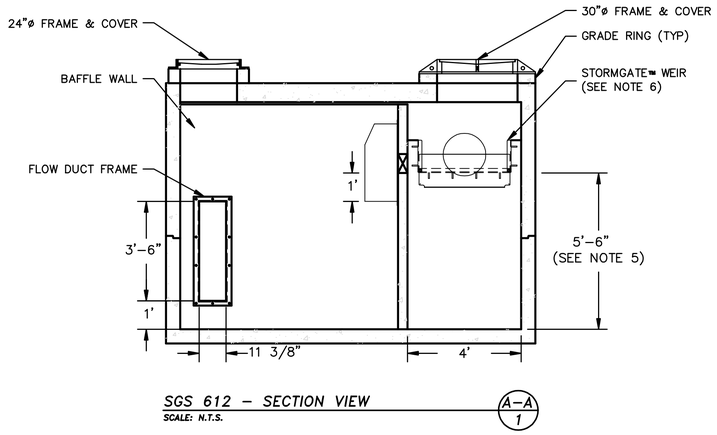


SGS 612 – PLAN VIEW (1/1)

SCALE: N.T.S.



SGS 612 – SECTION VIEW (A–A / 1)

SCALE: N.T.S.

SHEET	DATE	BY	REVISION
1/2			
1			

DESIGNED BY: ARG DRAWN BY: ARG

STORMGATE SEPARATOR – SGS 612
STANDARD DETAIL
PLAN & SECTION VIEW

DATE: 09/15/03 | PROJECT NO.: | DRAWING FILE NAME: SGS 612.DWG

CONTECH STORMWATER SOLUTIONS
contechstormwater.com

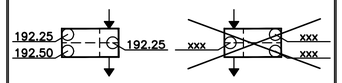
GENERAL NOTES

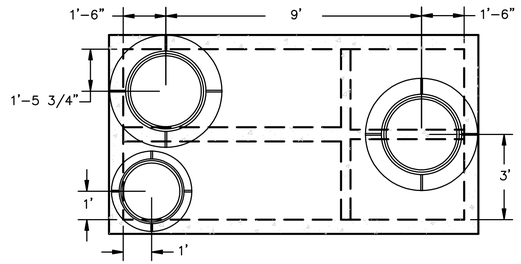
1.) STORMGATE SEPARATOR BY CONTECH STORMWATER SOLUTIONS, PORTLAND, OREGON 800/548–4667.
2.) PRECAST CONCRETE VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C857 AND C858.
3.) INLET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
4.) PRECAST STORMGATE SEPARATOR EQUIPPED WITH EITHER CORED OPENINGS OR KNOCKOUTS AT INLET/OUTLET LOCATION.
5.) STANDARD SUMP DEPTH IS 5.5 FEET BELOW INLET PIPE, STANDARD SEDIMENT STORAGE DEPTH IS ONE FOOT, AND STANDARD OIL STORAGE DEPTH IS ONE FOOT.
6.) CONTRACTOR TO ADJUST WEIR TO DESIGN ELEVATION. WHEN SETTING SCREWS ON WEIR PLATE DO NOT EXCEED 5.0 FT–LBS TOURQUE. SEAL WEIR WITH SILICONE SEALANT AFTER FINAL ADJUSTMENT.
7.) ALL STORMGATE SEPARATORS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR DETAILS.
8.) DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL VAULT DIMENSIONS AND CONFIGURATION WILL BE SHOWN ON THE PRODUCTION SHOP DRAWING.

STORMGATE SEPARATOR™ DATA

SGS MODEL NUMBER			SGS 612
WATER QUALITY FLOW RATE (CFS)			0.91
PEAK FLOW RATE (CFS)			16.0
	I.E.	MATERIAL	DIAMETER
INLET PIPE #1	186.76		24"
OUTLET PIPE	186.76	CONC	30"

CONFIGURATION & RIM ELEVATION(S) (SELECT ONE):





SGS 612 – TOP VIEW (1/2)

SCALE: N.T.S.

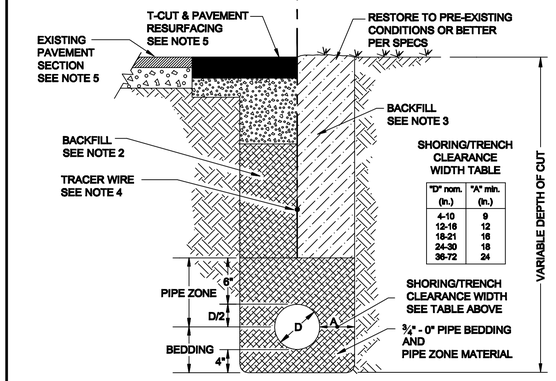
SHEET	DATE	BY	REVISION
1/2			
1			

DESIGNED BY: ARG DRAWN BY: ARG

STORMGATE SEPARATOR – SGS 612
STANDARD DETAIL
NOTES, SITE DATA & TOP VIEW

DATE: 12/05/03 | PROJECT NO.: | DRAWING FILE NAME: SGS 612.DWG

CONTECH STORMWATER SOLUTIONS
contechstormwater.com



NOTES:

1. These trench backfill requirements apply to all public utility pipes. For additional requirements, see *CWS Design and Construction Standards* and City's *Engineering Design Manual* sections 210.18 & 210.19.
2. For trenches 12" wide or less in streets with classifications higher than Residential, use controlled density fill (CDF) as per sec 210.19. For all other trenches, use 3/4" - 0" aggregate compacted to 95% of max density per *AASHTO* t-99 and *ODOT/APWA spec* 00405.
3. Use class 'A' backfill compacted to 90% of max density per *AASHTO* t-99 and *ODOT/APWA spec* 00405.
4. Tracer wire shall be placed above non-metalic pipe and 2 feet below finished grade. See *Oregon State Plumbing Code* and City's *Engineering Design Manual* section 210.18.D.1.
5. Restore to original conditions or better. See specs and *Beaverton Standard Dwg* 302.
6. For conduit trench requirements see *Beaverton Standard Dwg* 301.

City Of Beaverton

PUBLIC WORKS DEPARTMENT			PIPE TRENCH BACKFILL
CITY ENGINEER: Terry Waldele, P.E.	DATE: 2 - 22 - 07	DRAWN BY: JR - ED	DRAWING NO.: 300

NOTES:

SEE PAGE 5 FOR SHOP DRAWINGS. ACTUAL VAULT DIMENSIONS VARIED FROM THIS DETAIL.

APPROXIMATELY 8 WEEK ORDER TIME. CALL FOR INFO.

PROJECT INTENT - PRETREATMENT OF SURFACE WATER RUNOFF. CONSTRUCTED BY CITY FORCES

NAD 83 OREGON STATE PLANE, NORTH ZONE, INTERNATIONAL FOOT

REGISTERED PROFESSIONAL ENGINEER 17943PE OREGON JULY 25, 1995 MARK E. BOGUSLAWSKI

EXPIRATION DATE: 12/31/

CITY OF BEAVERTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

		NO.	DATE	REVISION	BY
DESIGNED BY:	MB				
DRAWN BY:	AB	1	10/06/09	CONSTRUCTION SET – ADJUSTED TO FIT VAULT SHOP DRAWINGS	MB
CHECKED BY:	MB				
APPROVED BY:	MB				

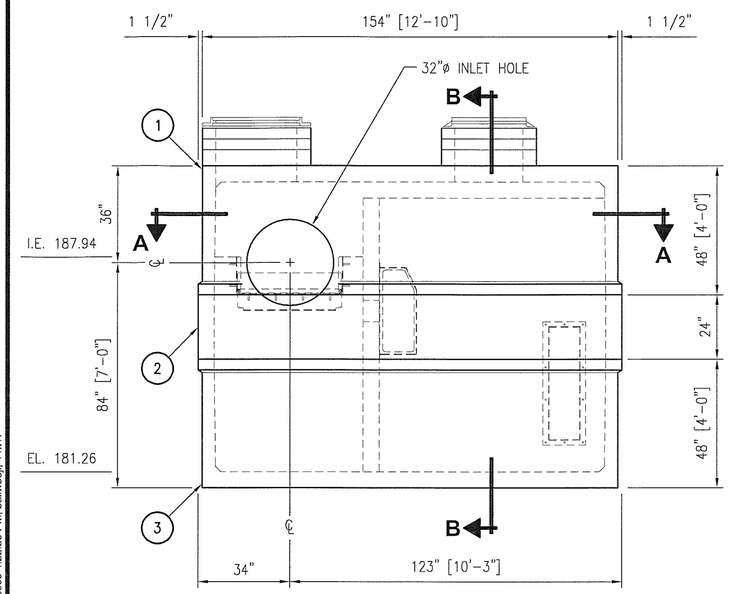
SW 158TH AVENUE - STORM
PRETREATMENT STRUCTURE

DETAILS

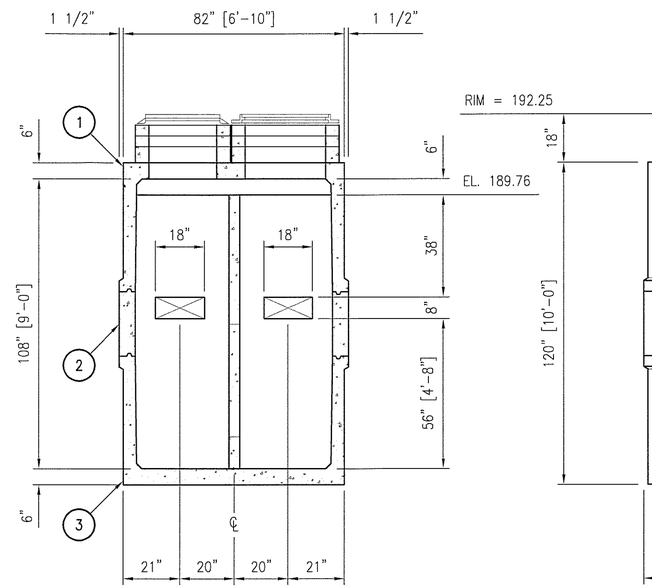
DATE: 8/04/09 | PROJECT NO: 8073
SHEET NO: 4 OF 5

FILE: X:\CAD SERVICES\DRAWINGS\2009\8073 – 158th WQ OUTFALL\CADD\8073-158th Outfall – SITE.dwg TAB:Detail – SHEET 4
PLOTTED: 10/2/09 AT 7:58AM BY: dbarnett

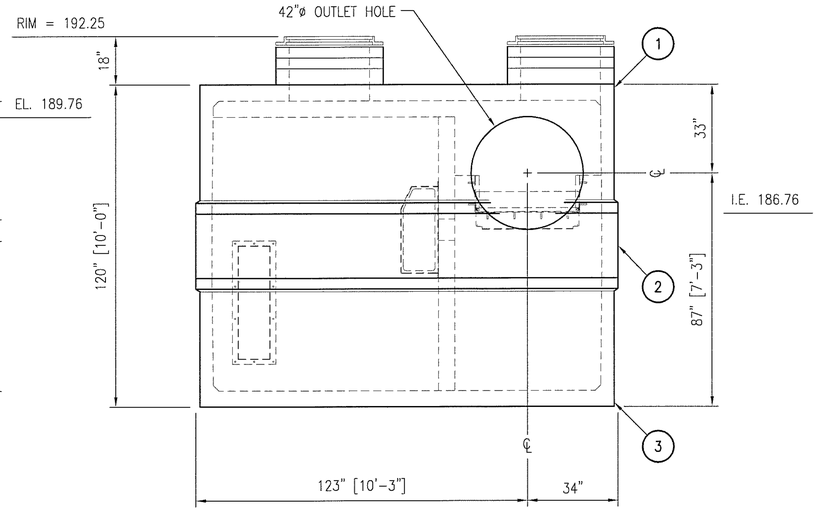
PROJECT:	CONTACT:
COSTCO–158th Ave IMPROVEMENTS	MARY RYAN 503–258–3112
CONTRACTOR: CONTECH	SPECIFYING AGENCY: N/A
ORDER NUMBER: N/A	SALES PERSON: RHONDA WILLIAMS



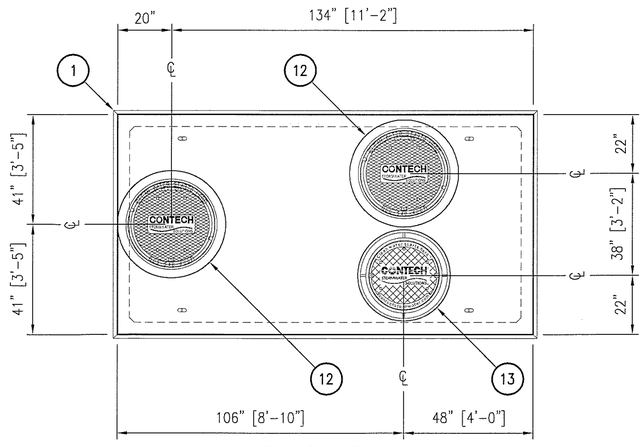
SIDE VIEW



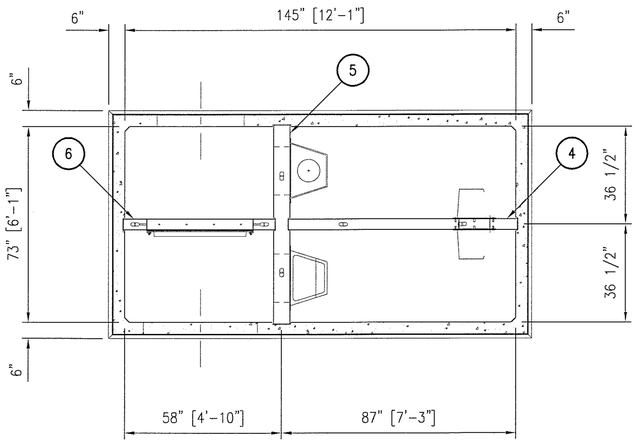
SECTION B-B



OPPOSITE SIDE VIEW



PLAN VIEW



SECTION A-A

PRELIMINARY
- FOR REVIEW ONLY -

NOTE:

1. INLET & OUTLET OPENINGS SIZED & LOCATED AS PER CONTECH CONFIGURATION DRAWING.
2. CONTECH TO PROVIDE ADJUSTABLE WEIR PLATE, ORIFICE BOX, FLOW DIFFUSER & FLOW DUCT.
3. CORE &/OR BLOCK OUT AS REQUIRED TO FORM INLET/OUTLET OPENINGS IN COVER & RISER.

ITEM	PART NO.	DESCRIPTION	QTY
13	----------	25"ø x 4" CONTECH RING & COVER	1
12	----------	30"ø x 3 1/4" CONTECH RING & COVER	2
11	----------	25"ø x 4" GRADE RING	2
10	----------	25"ø x 6" GRADE RING	1
9	----------	30"ø x 4" GRADE RING	4
8	----------	30"ø x 6" GRADE RING	2
7	----------	----------	--
6	----------	WEIR WALL – REINFORCING (PAGE 5 OF 5)	2
5	----------	DIVIDER WALL – REINFORCING (PAGE 4 OF 5)	2
4	----------	BAFFLE WALL – REINFORCING (PAGE 3 OF 3)	2
3	612.B.R.001	612 BASE – REINFORCING	1
2	612.R.R.001	612 RISER – REINFORCING x 24"	1
1	----------	612 COVER – REINFORCING (PAGE 2 OF 5)	1

Hanson HEIDELBERGCEMENTGroup
755 N.E. Columbia Blvd. Portland, OR 97211

TITLE: **CONTECH - STORMGATE SEPARATOR 612 VAULT - ASSEMBLY**

PAPER SIZE:	DRAWN: JB	DATE: 09–28–09	REV:
11 x 17	CHECKED: RM	DATE: 09–28–09	PAGE: 1 OF 5

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THIS DRAWING IS FULL SIZE WHEN 22" X 34" OR IS REDUCED TO HALF SCALE WHEN 11" X 17"

PROJECT INTENT - PRETREATMENT OF SURFACE WATER RUNOFF. CONSTRUCTED BY CITY FORCES NAD 83 OREGON STATE PLANE, NORTH ZONE, INTERNATIONAL FOOT

CITY OF BEAVERTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

DESIGNED BY:	MB	NO.	DATE	REVISION	BY
DRAWN BY:	AB	1	10/06/09	CONSTRUCTION SET – ADJUSTED TO FIT VAULT SHOP DRAWINGS	MB
CHECKED BY:	MB				
APPROVED BY:	MB				

SW 158TH AVENUE - STORM
PRETREATMENT STRUCTURE

VAULT SHOP DRAWINGS

DATE: 8/04/09 | PROJECT NO: 8073
SHEET NO: 5 OF 5

FILE: X:\CAD SERVICES\DRAWINGS\2009\8073 – 158th WQ OUTFALL\CADD\8073–158th Outfall – SITE.dwg TAB:Detail – SHEET 5
PLOTTED: 10/2/09 AT 7:58AM BY: dbarnett